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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,057	09/05/2003	Teng Xu	2003B093	1840
23455	7590	07/14/2005	EXAMINER	
EXXONMOBIL CHEMICAL COMPANY 5200 BAYWAY DRIVE P.O. BOX 2149 BAYTOWN, TX 77522-2149			JOHNSON, CHRISTINA ANN	
		ART UNIT	PAPER NUMBER	
			1725	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/657,057	XU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Christina Johnson	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 September 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-151 is/are pending in the application.  
 4a) Of the above claim(s) 49-91 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-48 and 92-151 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/25/04; 5/7/04; 9/5/03</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-48 and 92-151, drawn to a catalyst composition and method of making, classified in class 502, subclass 214.
  - II. Claims 49-92, drawn to a process for making olefins, classified in class 585, subclass 640.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of use, such as a catalyst for the reduction of nitrogen oxides.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II and vice versa, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Mr. Frank Reid on June 28, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-48 and 92-151. Affirmation of this election must be made by applicant in replying to this Office action. Claims 49-91 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-48 and 92-151 are rejected under 35 U.S.C. 102(b) as being anticipated by Martens et al.

Martens et al. (US 6,440,894) discloses a catalyst composition comprising a non-zeolitic molecular sieve, an inorganic oxide matrix, and a matrix material (column 3, lines 50-55). Suitable molecular sieve materials include SAPO-5,-8, -11, -16, -17, -18, -20, -31, -34, -35, -36, -37, -40, -41, -42, -44, -47, -56, and mixtures thereof (column 6,

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lines 50-65). Suitable inorganic binders include aluminum chlorhydrol which will convert to aluminum oxide (column 7, line 40 – column 8, line 10). Suitable matrix materials include kaolin clays such as Dixie, McNamee, Georgia, and Florida clays (column 8, lines 10-35).

It is taught that the catalyst is prepared by forming a slurry of the non-zeolitic molecular sieve, inorganic oxide sol, matrix material, and water, followed by spray drying, and calcination (columns 8-10). It is taught that the spray dried particles have a particle size of 50-200 microns (column 9, lines 60-65).

The reference does not specifically detail the metal content of the clay materials used. However, the instant specification details that Dixie, McNamee, Georgia, and Florida clays are examples of kaolin clays which could be used in the instant invention. Refer to page 26 of the instant specification. Therefore, it is the position of the examiner that, because the reference details the use of the same clay materials from the same source, the matrix material taught by the reference would inherently meet the low metal levels claimed. When the examiner has reason to believe that the functional language asserted to be critical for establishing novelty in claimed subject matter may in fact be an inherent characteristic of the prior art, the burden of proof is shifted to Applicants to prove that the subject matter shown in the prior art does not possess the characteristics relied upon. *In re Fitzgerald et al.* 205 USPQ 594.

As each and every element of the claimed invention is taught in the prior art as recited above, the claims are anticipated by Martens et al.

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9. Claims 1-3, 5-11, 13-19, 21-27, 29-32, 92-94, 96-102, 104-107, 116-119, 121-125, 127-131, 133-137, 139-143, 145-149, and 151 rejected under 35 U.S.C. 102(b) as being anticipated by Kibby et al.

Kibby et al. (US 5,939,349) discloses a catalyst composition comprising a non-zeolitic molecular sieve and a matrix material. Suitable molecular sieves include SAPO-11, SAPO-31, and SAPO-41 (column 3, lines 1-15). Suitable matrix materials include silica, alumina, and silica-alumina matrix materials (column 3, line 59 – column 4, line 25). The reference does not specifically disclose the metal content of the matrix material. However, given the method of preparation of the matrix material from a cogel no including any of the contaminant metals claimed, it is the position of the examiner that the reference would inherently meet the low metal content claimed. When the examiner has reason to believe that the functional language asserted to be critical for establishing novelty in claimed subject matter may in fact be an inherent characteristic of the prior art, the burden of proof is shifted to Applicants to prove that the subject matter shown in the prior art does not possess the characteristics relied upon. *In re Fitzgerald et al.* 205 USPQ 594.

As each and every element of the claimed invention is taught in the prior art as recited above, the claims are anticipated by Kibby et al.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Johnson whose telephone number is (571) 272-1176. The examiner can normally be reached on Monday-Friday, 7:30-5, with Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Christina Johnson*  
Christina Johnson  
Patent Examiner  
Art Unit 1725

7/11/05

July 11, 2005  
CAJ